

## Water Sampling and Testing

With the importance of water sampling results at a premium, San Juan Basin Health, La Plata County, City of Durango and EPA would like to help La Plata County residence understand how the process works. Region 8 EPA Sampling crews, in conjunction with Colorado Department of Public Health and Environment (CDPHE) Water Quality Division, and Mountain Studies Institute (MSI) have been and will be sampling locations from above Silverton, near the Gold King Mine, all the way to the Colorado border with may difficult to access locations. Crews will also sample in New Mexico, Utah and Arizona.

Samples are taken from the river and then filtered. Once at the location, collecting the sample may take ½ hour or more.

In order to minimize time needed for the laboratory analysis, EPA adds preservative prior to shipping samples. The standard procedure for analyzing for metals requires a 16 hour hold time with the preservative.

The samples must then be transported, either by hand or shipped to a laboratory. The turnaround time for laboratories is different depending on the number of personnel available, and number of instruments available. Small labs may only be able to guarantee a 48-hour turnaround time. Medium and large-capacity labs will be able to provide faster turnaround times. EPA is currently using a local laboratory in Durango, Green Analytical, which has been extremely helpful and plans to work through the weekend for this project; however, it is a small capacity lab and will not be able to process the high volume of samples anticipated to be taken.

EPA has now procured the services of a certified drinking water laboratory in Savannah, Georgia. Samples will be shipped overnight to the lab. EPA has requested the fastest possible turnaround time, which is likely to be 24 hours after the lab has received the samples. The samples are logged in and prepared for analysis. Each method has its own sample preparation and analysis requirements, and each step takes time. After the laboratory instrument runs the test, the sample results are reviewed against the appropriate methodology. If the samples data is valid, the report is prepared and released to EPA for review and interpretation, in order to put the results in context. Once the data report is completed, it is posted to the EPA website at [www.epaossc.org/GoldKingMine](http://www.epaossc.org/GoldKingMine).

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